

**WHAT IS CLAIMED IS:**

1       1. A method comprising:  
2       positioning a substrate and a light source assembly adjacent to each other,  
3       wherein the light source assembly is configured to generate light for  
4       reading or writing data to an optical data storage media, wherein the  
5       light source assembly comprises a first and second alignment marks,  
6       wherein the substrate comprises first and second alignment marks;  
7       adjusting a position of the light source assembly with respect to the substrate  
8       until a line extending between the first and second alignment marks of  
9       the light source assembly is substantially parallel to a line extending  
10      between the first and second alignment marks of the substrate;  
11      creating a rigid connection between the light source assembly and the  
12      substrate.

1       2. The method of claim 1 further comprising providing a first adhesive  
2       between the substrate and the light source assembly, wherein creating the rigid  
3       connection comprises activating the first adhesive to create a fixed bond between the  
4       substrate and the light source assembly.

1       3. The method of claim 2 wherein the first adhesive is applied to a surface of  
2       the substrate.

1       4. The method of claim 2 wherein the first adhesive is a heat activated  
2       adhesive, and wherein activating the first adhesive comprises subjecting the first  
3       adhesive to heat generated by a heat source.

1       5. The method of claim 1 wherein the light source assembly comprises a light  
2       source configured to emit a light beam for reading or writing data to the optical data  
3       storage media, wherein the line between the first and second alignment marks of the  
4       light source assembly is substantially parallel to a direction at which the light beam is  
5       emitted from the light source.

1        6. The method of claim 1 wherein adjusting further comprises concurrently  
2 viewing one of the first and second alignment marks of the light source assembly with  
3 one of the first and second alignment marks of the substrate through a microscope.

1        7. The method of claim 1 wherein adjusting further comprises concurrently  
2 viewing one of the first and second alignment marks of the light source assembly with  
3 a centerline of the substrate through a microscope, wherein the centerline extends  
4 between the first and second alignment marks of the substrate.

1        8. The method of claim 2 wherein the substrate comprises a bond pad, wherein  
2 the first adhesive is applied to the first bond pad.

1 *Sub A*    9. The method of claim 2 further comprising:  
2        providing a second adhesive between the substrate and an integrated circuit;  
3        adjusting a position of the integrated circuit with respect to the substrate;  
4        activating the second adhesive to create a fixed bond between the integrated  
5        circuit and the substrate.

1        10. The method of claim 9 wherein the second adhesive is applied after the  
2 first adhesive is activated.

1        11. The method of claim 9 wherein the position of the integrated circuit is  
2 adjusted with respect to the substrate before the second adhesive is activated.

1 *Sub B*    12. A method comprising:  
2        providing a first adhesive between a substrate and a light source, wherein the  
3        light source is configured to generate light for reading or writing data  
4        to an optical data storage media, wherein the substrate comprises first  
5        and second alignment marks, wherein the light source comprises first  
6        and second alignment marks;  
7        adjusting a position of the light source with respect to the substrate until a line  
8        extending between the first and second alignment marks of the light

9      *Sub A2* source is substantially parallel to a line extending between the first and  
10     second alignment marks of the substrate;  
11     activating the first adhesive to create a fixed bond between the substrate and  
12     the light source.

1        13. The method of claim 12 wherein the position of the light source is adjusted  
2        with respect to the substrate before the first adhesive is activated.

1 14. The method of claim 12 wherein the first adhesive is applied to the  
2 substrate.

1           15. The method of claim 12 wherein the first adhesive is a heat activated  
2 adhesive, and wherein activating the first adhesive comprises subjecting the first  
3 adhesive to heat generated by a heat source.

1           16. The method of claim 12 wherein the light source is configured to emit a  
2 light beam, wherein the line between the first and second alignment marks of the light  
3 source is substantially parallel to a direction at which the light beam is emitted from  
4 the light source.

5           17. The method of claim 12 wherein adjusting comprises concurrently viewing  
6       one of the first and second alignment marks of the light source with one of the first  
7       and second alignment marks of the substrate through a microscope.

8           18. The method of claim 12 wherein adjusting comprises concurrently viewing  
9       one of the first and second alignment marks of the light source with a centerline of the  
10      substrate through a microscope, wherein the centerline extends between the first and  
11      second alignment marks of the substrate.

1 19. The method of claim 12 further comprising:  
2 providing a second adhesive between the substrate and an integrated circuit;  
3 adjusting a position of the integrated circuit with respect to the substrate;

4 activating the second adhesive to create a fixed bond between the integrated  
5 circuit and the substrate.

1 ~~20. The method of claim 19 wherein the second adhesive is applied after the~~  
2 ~~first adhesive is activated.~~

*Adhesive*